



## Call of the Wetland

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# Now you see them, Now you don't!

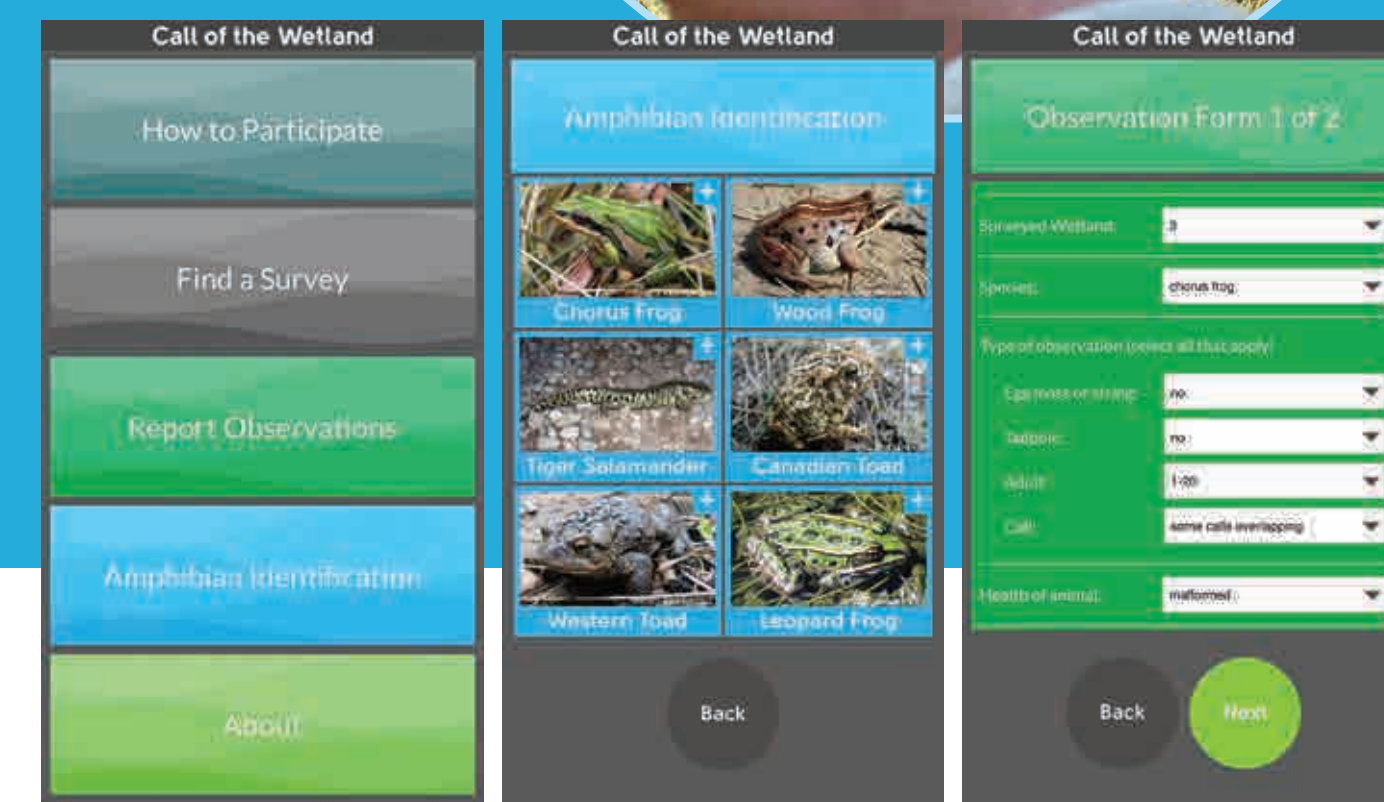
## What's happening in Calgary Wetlands?

Call of the Wetland is a citizen science program developed to monitor amphibians as an important biodiversity indicator in the City of Calgary.

Developed by the Miistakis

Institute and partners, Call

of the Wetland aims to better understand the health of wetlands within the City of Calgary and build a community of knowledgeable citizens to champion wetland protection and restoration.



### Why Wetlands?

Wetlands play a significant role in contributing to the rain cycle, filter sediments and pollutants, and lessen the impacts of flood and drought. Despite their value, wetlands continue to be degraded and disappear due to habitat loss, fragmentation, pollution and climate change. Wetlands in the City of Calgary are managed in terms of storm water infrastructure, however not for the high levels of biodiversity they support. To maintain and restore wetlands in and around the City, there is a need to promote awareness and better understanding of urban wetland health.

### There are two ways to participate in Call of the Wetland:

- 1 Participants sign up for a planned amphibian survey at one of 51 wetland and report findings on a smart phone application (each wetland is visited 9 times during the amphibian season), and
- 2 Participants report incidental (chance) amphibian observations on the smart phone application.

### How will the data be used?

Three years of data collected by volunteer citizen scientists will be used to determine presence or absence of amphibian species in Calgary wetlands. Occupancy modeling will be undertaken on the species data collected. The results will help inform the City of Calgary BiodiverCity Strategy, and will be shared with City planners.

### PRELIMINARY FINDINGS AFTER TWO SEASONS

To date, over **375 people** have downloaded the Call of the Wetland App

Over the first two seasons **180 people** have participated in amphibian surveys and **completed 584 surveys**

Three amphibian species have been observed: **boreal chorus frog, wood frog and tiger salamander**

### LESSONS LEARNED

- It takes a village to successfully design, implement and evaluate a citizen science program.
- Inconsistency in number of surveys completed per wetland effected both spatial and temporal representation of wetlands in the study area. These issues were addressed by supplementing volunteer data collection with paid student interns.
- To address challenges of participants accurately identifying amphibian species we developed a suite of mechanisms: training sessions, wildlife ID page, verification of participant observations by uploading photo or audio files, requiring validation (expert) of records where participants noted they were not confident in the identification.
- Engagement strategy identified a variety of methods to recruit volunteers (lunch and learns, field trips, social media campaigns, school presentations, hosting events for volunteer to meet up) – but local media coverage resulted in the most new survey sign-ups!



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#CallOfTheWetland

